

### REMARKS

Claims 1-45 were pending in this application before submission of this paper. Claims 1-45 were rejected. Claims 12, 27 and 42 are amended. Claims 46-51 are added. No new matter has been added. In view of the amendments and the following remarks, reconsideration and allowance of all pending claims are respectfully requested.

Claims 1-3, 10-12, 16-18, 25-27, 31-33, and 40-42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Angel* in view of *Bittner*. Claims 4, 6, 19, 21, 34, and 36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Angel* in view of *Bittner* and further in view of *Grossman*. Claims 8, 23, and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Angel* in view of *Bittner* and further in view of *Yellin*. Claims 5, 7, 20, 22, 35, and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Angel* in view of *Bittner* and further in view of *Grossman*, *Whygodny*, *Miller*, and *O'Donnell*. Claims 9, 24, and 39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Angel* in view of *Bittner* and further in view of *Yellin*, *Whygodny*, *Miller*, and *O'Donnell*. Applicant respectfully traverses this rejection. Neither *Angel*, *Bittner*, *Grossman*, *Yellin*, *Whygodny*, *Miller*, *O'Donnell*, nor any combination thereof, teach all of the features recited in Applicant's Claims as amended.

The Office Action rejected independent Claim 1 by citing a procedure described in *Angel* for instrumenting a byte code computer program and a procedure described in *Bittner* for eliminating redundant calculations. Claim 1 teaches "eliminating pairs of probe locations that would produce redundant information." The method taught by Claim 1 is significantly different from the procedure in *Bittner* cited by the Office Action.

The procedure in *Angel* is directed to examining byte code, selecting portions of the byte code for instrumentation, and instrumenting the portions to provide instrumented byte code. The procedure in *Bittner* is directed to the elimination of redundant calculations while the target program is being compiled such that no mathematical expression along any path in the target program is evaluated more than once. However, *Bittner* does not describe how the redundant calculations are eliminated. Specifically, *Bittner* does not teach, "eliminating pairs of probe locations that would produce redundant information."

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Additionally, there is no motivation to combine *Bittner* with *Angel*. The elimination of redundant calculations disclosed in *Bittner*, is unrelated to "eliminating pairs of probe locations that would produce redundant information." Furthermore, *Angel* does not include any suggestion or motivation to modify a method for instrumenting portions of byte code by eliminating redundant calculations.

Neither *Angel*, *Bittner*, nor any combination thereof disclose anything about "eliminating pairs of probe locations that would produce redundant information," as recited in Applicant's Claim 1. Applicant respectfully submits that the rejection of Claim 1 is overcome and requests that the rejection be withdrawn.

Claims 12, 16, 27, 31 and 42, include limitations substantially similar (albeit different in other important ways) to the limitations claimed in the currently amended Claim 1. As discussed above, Claim 1 is allowable. Thus, Claims 12, 16, 27, 31 and 42 are allowable for at least the same reasons that Claim 1 is allowable, and notice to that effect is solicited.

Newly added Claim 46 teaches, "determining, inserting and collecting occur at a time other than when the application is being compiled." As discussed above, *Bittner* is directed to the elimination of redundant calculations while the target program is being compiled. *Bittner* does not teach, "determining, inserting and collecting occur at a time other than when the application is being compiled." Thus, Claim 46 is proposed to be allowable, and notice to that effect is solicited.

Newly added Claims 47-51 include limitations substantially similar (albeit different in other important ways) to the limitations claimed in the Claim 46. As discussed above, Claim 46 is proposed to be allowable. Thus, Claims 47-51 are allowable for at least the same reasons that Claim 46 is allowable, and notice to that effect is solicited.

Furthermore, dependent Claims 2-11, 13-15, 17-26, 28-30, 32-41 and 43-51 are allowable for at least the same reasons that the base claims on which they rely are allowable, and notice to that effect is solicited.

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In view of the foregoing amendments and remarks, all pending claims are believed to be allowable and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicant at the telephone number provided below.

Respectfully submitted,

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